

CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	Anderson 612 Timber Permit
Proposed Implementation Date:	December, 2011
Proponent:	Lincoln Station, Clearwater Unit, Southwestern Land Office, Montana DNRC
Location:	Section 26 T. 14 N., R. 9 W., P.M.M.
Counties:	Lewis and Clark

I. TYPE AND PURPOSE OF ACTION

The Montana Department of Natural Resources and Conservation (DNRC) is proposing to harvest approximately 200 MBF of timber from 20 acres Section 26 T. 14 N., R. 9 W. The proposed project would salvage harvest approximately 75 MBF of lodgepole pine and ponderosa pine trees killed by the mountain pine beetle (*Dendroctonus ponderosae*) and approximately 25 MBF of spruce killed by the spruce beetle and Western spruce budworm. Up 100 MBF of live and recently infested trees would also be cut. The proposed harvest would salvage the value of dead trees, reduce bark beetle populations, and reduce competition in the remaining stand.

The project objectives are to:

- 1) Maximize revenue over the long-term for the School Trust accounts from the timber resources and salvage timber on state forests that is dead, dying or is threatened by insects, disease, fire, or windthrow as mandated by State Statute 77-5-207, MCA,
- 2) Manage the identified parcel intensively for healthy and biologically diverse forests to provide long-term income for the Trust.
- 3) Improve timber stand health and vigor.

The lands involved in this proposed project are held by the State of Montana in trust for the Montana State University Trust (Enabling Act of February 22, 1889; 1972 Montana Constitution, Article X, Section 11). The Board of Land Commissioners and the DNRC are required by law to administer these trust lands to produce the largest measure of reasonable and legitimate return over the long run for the beneficiary institutions (Section 77-1-202, MCA). The DNRC would manage lands involved in this project in accordance with the State Forest Land Management Plan (DNRC 1996) and the Administrative Rules for Forest Management (ARM 36.11.401 through 450) as well as other applicable state and federal laws.

II. PROJECT DEVELOPMENT

1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED:

Provide a brief chronology of the scoping and ongoing involvement for this project.

A DNRC wildlife biologist and soils scientist/hydrologist were consulted to help determine if any special circumstances existed.

2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:

Montana Department of Environmental Quality, burning restrictions. All harvested volume will be hauled across DNRC or purchaser's land.

3. ALTERNATIVES CONSIDERED:

Alternative A – No Action

Under this alternative no harvesting would occur at this time.

Alternative B – Timber Harvest (Action)

Approximately 200 MBF of timber would be harvested from approximately 20 acres. This harvesting would take place as soon as possible under the HB612 timber permit process.

III. IMPACTS ON THE PHYSICAL ENVIRONMENT
<ul style="list-style-type: none">• <i>RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.</i>• <i>Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.</i>• <i>Enter "NONE" If no impacts are identified or the resource is not present.</i>

4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:

Consider the presence of fragile, compactable or unstable soils. Identify unusual geologic features. Specify any special reclamation considerations. Identify any cumulative impacts to soils.

No unstable slopes or unusual geology features are present. The proposed harvest is located on an alluvial terrace above the Blackfoot River floodplain. The terrain is nearly flat with shallow swales and interspersed wetlands. The soils primary alluvial soils in the project area are Stryker silt loams on 0-2% slopes on the forested alluvial terrace with included areas of more sandy and gravelly alluvial soils. Stryker soils have slight risk of erosion, and are subject to rutting if operated on when wet, due to low soil strength. Soils tend to remain wet to moist late into the spring. These sites are better suited to winter operations of frozen or adequate snow of 12 inches or more to minimize equipment disturbance. This is a very productive site supporting mixed conifers and ages. There is approximately 10 acres of previous salvage harvest in the DNRC parcel and skid trails have revegetated. There are minimal effects of previous harvest or cumulative effects.

Ground based skidding would be limited to winter or adequately dry conditions. Harvest around the perimeter of wetlands would maintain protective wetland management zones to limit ground disturbance. The selective harvest/thinning of overstocked trees would improve tree spacing, reduce competition and improve growth of retained trees. Mitigations include winter season of use limits, and retaining a portion of woody debris and fine litter for moisture retention and to support mycorrhizae for best tree growth. The mycorrhizae fungal network is connected to plant roots and helps improve nutrient and moisture flow to plants. Planned ground skidding operations would have low risk of direct, in-direct and cumulative impacts based on implementing BMP's and mitigation measures.

5. WATER QUALITY, QUANTITY AND DISTRIBUTION:

Identify important surface or groundwater resources. Consider the potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality. Identify cumulative effects to water resources.

The proposed sale is located in NE ¼ Section 26, T14N, R9W which includes a segment of the Blackfoot River that is classified as B-1 in the Montana Water Quality Standards. The project area is located within the 40 mile segment of the Blackfoot River (MT76F001-020) that has been identified as an impaired water body in Montana's 2010 DEQ TMDL database, because the stream only partially supports aquatic life, cold water fisheries, and drinking water and no other beneficial uses are listed as impaired. The water quality impairment is inferred as minor to moderate based in-part on macro invertebrate sampling. The probable causes of impairment include metals, siltation, and other habitat alterations. TMDL mitigations were developed for the Upper Blackfoot. Prescribed mitigations are to reduce sediment from eroding banks and roads. This DNRC parcel has a broad floodplain and relatively stable riverbank, considerable levels of large woody debris along streambanks and no roads adjacent to the river. On the access haul route, there is one road crossing of an unnamed tributary of Spring Creek. The crossing is on private land and provides fish connectivity and is not a sediment source.

The proposed project has very low risk of direct, indirect or cumulative effects to water quality based on the following considerations. Harvest design is consistent with TMDL mitigations for the Upper Blackfoot River and the project is not in a municipal watershed. The salvage, thinning and improvement harvest is small scale project of up to 20 acres on flat slopes. No streams occur within the harvest units and no SMZ harvest is proposed within 50 ft. of the Blackfoot River. A Riparian Management Zone (RMZ) of 100 ft has been designated for this project near the Blackfoot River. All snags and stream recruitable trees for large woody debris would be retained in the 50 ft SMZ and the proposed harvest would retain 50% of trees in the 50-100 ft RMZ. No sites with high erosion risk were identified that would be affected and no water quality impacts were observed from the proposed existing access roads. Wetland Management Zones would be designated around the perimeter of wetlands to restrict operations in the wetland sites. The proposed harvest operations in the winter minimizes soil disturbance and provides protection for soils and wetland management zones. Skid trails, disturbed roads and landings would be stabilized by grass seeding, slashing and installing drainage where needed to prevent erosion.

The harvest of mainly dead, dying and beetle infested pine and thinning of mixed tree species to improve spacing and growth is not expected to have a measurable influence on: water quality, the amount or timing of runoff (water yield), or stream stability from the proposed project area when compared to the effects anticipated under no action. In summary, the proposed harvest operations presents low risk of direct, in-direct and cumulative impacts based on implementing BMP's, WMZ's, RMZ'S and Forest Management Rules and mitigation measures.

6. AIR QUALITY:

What pollutants or particulate would be produced? Identify air quality regulations or zones (e.g. Class I air shed) the project would influence. Identify cumulative effects to air quality.

The DNRC is a member of the Montana/Idaho Airshed Group which was formed to minimize or prevent smoke impacts while using fire to accomplish land management objectives and/or fuel hazard reduction (Montana/Idaho Airshed Group 2006). The Group determines the delineation of airsheds and impact zones throughout Idaho and Montana. Airsheds describe those geographical areas that have similar atmospheric conditions, while impact zones describe any area in Montana or Idaho that the Group deems smoke sensitive and/or having an existing air quality problem (Montana/Idaho Airshed Group 2006).

The project area is in Airshed 6 which includes all of Lewis and Clark County. The project area is located approximately 1.5 miles southwest of the town of Lincoln. Year-round homes and vacation homes do exist adjacent to and within a few miles of the project area. The Bob Marshall / Scapegoat Wilderness area is approximately 11 miles north of the project area. This wilderness area exceeds 5,000 acres and as such, is considered a Federal Class I Area that ultimately receives protection under the Federal Clean Air Act of 1977.

Alternative A - No Action

Under the No Action Alternative, no slash piles would be burned within the project areas. Thus, there would be no effects to air quality within the local vicinity and throughout Airsheds 6.

Alternative B – Timber Harvest (Action)

Under the Action Alternative, slash piles consisting of tree limbs and tops and other vegetative debris would be created throughout the project area during harvesting. These slash piles would ultimately be burned after harvesting operations have been completed. Burning would introduce particulate matter into the local airshed, temporarily affecting local air quality. Over 70% of emissions emitted from prescribed burning is less than 2.5 microns (National Ambient Air Quality PM 2.5). High, short-term levels of PM 2.5 may be hazardous. Within the typical column of biomass burning, the chemical toxics are: Formaldehyde, Acrolein, Acetaldehyde, 1,4 Butadiene, and Polycyclic Organic Matter.

Burning within the project area would be short in duration and would be conducted when conditions favor good to excellent ventilation and smoke dispersion as determined by the Montana Department of Environmental Quality and the Montana/Idaho Airshed Group. Prior to burning a "Prescribed Fire Burn Plan" would be done for the area. The DNRC, as a member of the Montana/Idaho Airshed Group, would burn only on approved days.

Thus, direct and indirect effects to air quality due to slash pile burning associated with the proposed action would be minimal.

Burning that may occur on adjacent properties in combination with the proposed action could potentially increase cumulative effects to the local airshed and the Class I Areas. The United States Forest Service and large scale industrial forestry operations in the area participate as airshed cooperators and operate under the same Airshed Group guidelines as the DNRC. Non-industrial timberland operators are regulated by the Montana Department of Environmental Quality and burning is only allowed during seasons that provide good ventilation and smoke dispersion. Thus, cumulative effects to air quality due to slash pile burning associated with the proposed action would also be expected to be minimal.

Harvesting and log hauling could create dust which may affect local air quality. Harvesting operations would be short in duration and could occur during the winter months that would minimize dust dispersal. Thus, direct, indirect, and cumulative effects to air quality due to harvesting and hauling associated with the proposed action would be minimal.

7. VEGETATION COVER, QUANTITY AND QUALITY:

What changes would the action cause to vegetative communities? Consider rare plants or cover types that would be affected. Identify cumulative effects to vegetation.

Rare plants and Noxious Weeds Analysis:

No rare plants have been identified in the harvest area. The noxious weeds spotted knapweed and thistle occur in this area. To prevent introduction of new weeds, off-road equipment would be cleaned prior to entry into harvest areas. Newly disturbed roads and landings would be seeded to grass to reduce the spread of weeds. Winter harvest would minimize soil disturbance. Noxious weeds would not be greatly increased by this action or cause cumulative impacts to vegetation based on the mitigation measures. The landings would be prioritized for herbicide treatment following the sale to reduce existing weeds.

General Vegetation:

The current stand is comprised of approximately 80 percent spruce, 5 percent lodgepole pine, 5 percent ponderosa pine, and the remaining 5 percent is a scattered mix of Douglas-fir, subalpine fir and hardwoods. The stand is an uneven-aged multi-storied stand in the form of small groups of even aged trees. Lodgepole pine was a greater component of the stand prior to a salvage harvest approximately 10 years ago. Lodgepole and ponderosa pine trees are being killed by the mountain pine beetle, and spruce trees are being killed by the spruce beetle. Spruce and fir trees are also being severely defoliated by the western spruce budworm.

Harvest in the stand would change stand conditions by removing live trees and dead, dying or trees that are likely to be killed by the various insects and disease in the stand. Salvage harvest would include harvest of all lodgepole pine, beetle killed ponderosa pine and spruce, and spruce or fir trees that have been defoliated greater than 60 percent by the budworm. The harvest of green trees is designed as a sanitation harvest. Trees of all age and size classes would be harvested. Harvest would focus on removing those trees that show poor form and vigor, and creating growing space for the remaining trees.

8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:

Consider substantial habitat values and use of the area by wildlife, birds or fish. Identify cumulative effects to fish and wildlife

Aquatic Life and Habitats

The Blackfoot River flows through this DNRC project section. MTFWP MFISH waterbody report identifies the Blackfoot River as supporting rare Bull trout, common Westslope Cutthroat Trout, Brook Trout and other minor species. Existing fish habitat components considered stream channel stability, habitat connectivity, water temperature as affected by stream shading and large woody debris levels on sites near the proposed harvest area (river mile 103.8 to 104). No harvest activities are planned within 50 ft of the river, or meander channels and there is very low risk of impacts to stream channel stability as discussed under water quality and resources section 5. There is very low risk of impacts to water temperature based on shading reduction considering that the small area of proposed harvest is located on the north side of the river, no harvest is proposed in the SMZ.

The proposed harvest would have minimal effects to large woody debris (LWD), considering there are high levels of existing LWD and harvest would retain 50% snags a proportion of large trees in the 50-100 ft. RMZ

The proposed harvest would use existing roads, and no sediment sources were identified along the haul route and there is low risk of sediment at the existing crossing. No new stream crossings are proposed, and there is no potential effect to fish habitat connectivity within the proposed harvest units or haul route. There is low risk of direct, in-direct or cumulative effects to fish habitat or aquatic life with the proposed action.

Terrestrial Wildlife: The project area provides habitat for a variety of wildlife species, including a host of species that require mature forests. Deer, elk, and moose likely use the project area much of the year; winter range for each of these species exists in the project area, but no elk security habitats likely exist due to the proximity to the uncontrolled access routes. Under the action alternative, proposed sanitation harvesting on up to 20 acres would lead to more open areas in portions of the project area. This would alter habitats for wildlife species requiring mature forests, while creating habitats for species needing more open stands. Thus, a low risk of adverse direct, indirect, or cumulative effects to species requiring mature forested stands or big game winter range would be anticipated with the proposed activities. **(The complete wildlife checklist can be found in attachment B)**

9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:

Consider any federally listed threatened or endangered species or habitat identified in the project area. Determine effects to wetlands. Consider Sensitive Species or Species of special concern. Identify cumulative effects to these species and their habitat.

Fisheries --Bull Trout is a threatened fish species and Westslope Cutthroat trout is a sensitive fish species that inhabits the Blackfoot River. There are habitat alterations, and dewatering along the Blackfoot River from the confluence with Landers Fork to Nevada Creek as noted in the water resources section. No harvest activities are planned within 50 feet of the Blackfoot River or floodplain channels. A 100 ft Riparian Management Zone would be designated from the river's edge. Selective harvest in the 50 to 100 ft RMZ would retain 50% or more of the representative trees and snags to provide large woody debris for habitat complexity and riverbank stability. Based on the harvest design, mitigation and previous descriptions in the water quality section 5 and aquatic life section 8 there is low risk of direct, in-direct or cumulative effects to threatened or sensitive fish or aquatic life with the proposed action as outlined in the hydrology and aquatic life sections.

Terrestrial Wildlife: The project area contains some potential habitats for grizzly bears, bald eagles, fisher, gray wolves, and pileated woodpeckers. Habitats for grizzly bears are somewhat limited, but proposed harvesting could open up stands in an area where extensive grizzly bear use would not be anticipated due to existing disturbance vectors. Proposed activities would retain visual screening adjacent to riparian areas and would largely retain a reasonably-fully stocked stand following proposed activities, which would further minimize the potential for disturbance to grizzly bears. Proposed harvesting could alter potential perch and/or nest trees for bald eagles, but numerous potential perch and nest trees would be retained in the project area. Seasonal mitigations would limit the potential for disturbance to nesting bald eagles should they be using the known nest. Proposed activities could cause slight shifts in use by wolves and their prey, however, no key habitat components are known to exist in the project area and long-term use is not expected to appreciably change. Proposed harvesting could open up stands on as much as 20 acres, which could reduce pileated woodpecker habitats and upland fisher habitats, but some habitats for each of those species would exist following proposed activities. Thus, a low risk of adverse direct, indirect, or cumulative effects to grizzly bears, bald eagles, fisher, gray wolves, or pileated woodpeckers would be expected to occur with the proposed activities. **(The complete wildlife checklist can be found in attachment B)**

10. HISTORICAL AND ARCHAEOLOGICAL SITES:

Identify and determine effects to historical, archaeological or paleontological resources.

An old homestead exists to the west of the project area, but no activities are planned within 100 feet of the structures. Thus no impacts to historical or archaeological sites would be expected.

11. AESTHETICS:

Determine if the project is located on a prominent topographic feature, or may be visible from populated or scenic areas. What level of noise, light or visual change would be produced? Identify cumulative effects to aesthetics.

Alternative A – No Action

If the no action alternative is selected, patches created by dead trees will exist. Potentially these openings will likely be more given the currently seen mountain pine beetle outbreak timeline. The trees that would be killed by the beetle attack would lose all foliage, and eventually branches (over several years). Although the tree bole would still be in existence, this would not be very apparent in the distance, but would be more easily seen within the middleground viewshed. The color would be lighter than the current view after the attacked trees die. Thus, direct, indirect, and cumulative effects to aesthetics would be minimal.

Alternative B – Timber Harvest (Action)

The proposed sale would not be visible from any high use or heavily populated sites in the area. The openings created would be minimal. Large portions of the proposed harvest units would be blocked from view by topography or by vegetation. The removal of bark beetle attacked trees could change the foreground view from within the stand and minimized amount of mature trees. Over the long term, these areas would be noticed by the absence of tree crowns, occurrence of regeneration, and potential change in species present.

Through the proposed sale area, slash from the harvest would be noticeable yet temporary. Generally slash disappears from the site within five years, and is often covered by other vegetation within three years. Again, sites would be generally lighter in color than can be seen currently.

Harvest systems and activities would be ground-based and would be done during the winter. Harvest activities would be quite audible, and, depending upon air conditions, equipment could be heard many miles from their location. The proposed harvest of this volume would most likely be done within a month and would occur during the general “work week”. Direct, indirect, and cumulative effects to aesthetics due to harvesting and hauling associated with the proposed action would be minimal.

12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:

Determine the amount of limited resources the project would require. Identify other activities nearby that the project would affect. Identify cumulative effects to environmental resources.

No negative direct, indirect or cumulative effects are expected to occur as a result of the proposed project.

13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:

List other studies, plans or projects on this tract. Determine cumulative impacts likely to occur as a result of current private, state or federal actions in the analysis area, and from future proposed state actions in the analysis area that are under MEPA review (scoped) or permitting review by any state agency.

State Forest Land Management Plan EIS, DNRC 1996, set the strategy that guides DNRC management decisions statewide.

Lincoln Rural Fire District Fire Risk Management Strategy Community Protection Plan, Lincoln Rural Fire District and Residents of the Lincoln Community, January 2005.

South Lincoln Timber Sale EA, DNRC 2009, Harvest 3.00 MMBF on sections 22, 28 and 34 T. 14N R9W.

Beaver Lodge Salvage Timber Sale EA, DNRC 2009, harvest 3.00 MMBF on sections 4 and 16 T14N R9W and section 16 T14N R10W.

Whiskey Gulch Salvage Timber Sale EA, DNRC 2008, harvest 2.5 MMBF on section 36 T15N R07W.

Still Cool Bugs Salvage Timber Sale EA, DNRC 2007, harvest of 1.0 MMBF on section 10 T14N R08W.

Keep Cool Bugs Timber Sale EA, DNRC 2005, harvest of 1.3 MMBF on section 10 T14N R08W.

Golden Arches EA, DNRC 2004, harvest of 5.6 MMBF in the Landers Fork drainage.

Cool Flat 4X4 EA, DNRC 2005, harvest of 1.5 MMBF on Sections 8, 16, 19, and 22 of T14N, R8W.

Snow Talon Burned Area Emergency Rehabilitation Plan, FS 2003, assesses post-fire conditions.

Helena National Forest Weed EIS, FS 2004, proposes weed control on FS ground in the Lincoln area.

Lincoln Post-Fire Rehabilitation Project Categorical Exclusion, FS 2004, proposal to address non-emergency fire rehabilitation needs within the Snow Talon and Moose Wasson burned areas such as tree and shrub plantings, biological weed control, insect monitoring, pesticide, and pheromone treatments, and administrative site maintenance and repair.

Snow Talon Fire Salvage FEIS, FS 2005, proposal to salvage approximately 25 MMBF, from approximately 2700 burned acres, and associated reclamation all within the Copper Creek drainage and associated haul road in the Landers Fork and Copper Creek drainage.

IV. IMPACTS ON THE HUMAN POPULATION

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" if no impacts are identified or the resource is not present.*

14. HUMAN HEALTH AND SAFETY:

Identify any health and safety risks posed by the project.

Human health would not be impacted by the proposed timber sale or associated activity. Safety considerations and temporary risks would increase for the professional contractors working within the sale area. Log truck traffic would increase but safety concerns would be minimized by posting signs and imposing a speed limit, if necessary. There are no unusual safety considerations with the proposed timber sale. The general public and local residents would not face increased health or long term safety hazards because of the proposed timber sale

No additional negative effects would be expected as a result of the proposed action

15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:

Identify how the project would add to or alter these activities.

People are currently employed in the wood products industry in the region. Due to the relatively small size of the timber sale, there would be no measurable direct, indirect, or cumulative effects from this proposed action on industrial, commercial and agricultural activities and production.

16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:

Estimate the number of jobs the project would create, move or eliminate. Identify cumulative effects to the employment market.

A few short-term jobs in the local area may be created for the duration of the proposed action.

17. LOCAL AND STATE TAX BASE AND TAX REVENUES:

Estimate tax revenue the project would create or eliminate. Identify cumulative effects to taxes and revenue.

The proposed action has only indirect, limited implications for tax collection.

18. DEMAND FOR GOVERNMENT SERVICES:

Estimate increases in traffic and changes to traffic patterns. What changes would be needed to fire protection, police, schools, etc.? Identify cumulative effects of this and other projects on government services

Aside from contract administration there would be minimal impacts related to demand for government services due to the relatively small size of the timber sale the short-term impacts to traffic, and the small possibility of a few people temporarily relocating to the area.

19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:

List State, County, City, USFS, BLM, Tribal, and other zoning or management plans, and identify how they would affect this project.

The State Forest Land Management Plan (SFLMP) is the plan under which DNRC manages forested state trust lands. DNRC developed the SFLMP in 1996 to provide field personnel with consistent policy and direction for the management of forested state trust lands. The SFLMP provides the philosophical basis, technical rationale, and direction for DNRC's forest management program. The SFLMP is premised on the philosophy that the best way to produce long-term income for the trust is to manage intensively for healthy and biologically diverse forests. In the foreseeable future, timber management will continue to be the primary source of revenue and primary tool for achieving biodiversity objectives on forested state trust lands.

The DNRC Administrative Rules for Forest Management (*ARM 36.11.401 through 456*) are the specific legal resource management standards and measures under which DNRC implements the SFLMP and subsequently its forest management program. The Rules were adopted in March 2003 and provide the legal framework for DNRC project-level decisions and provide field personnel with consistent policy and direction for managing forested state trust lands. All forest management projects administered by DNRC on forested state trust lands must comply with the Rules.

In January 2005 the Lincoln Rural Fire Department and residents of the Lincoln Community, in cooperation with the Montana DNRC and others adopted the Lincoln Rural Fire District Fire Risk Management Strategy and Community Protection Plan. In that document the area proposed for harvest was identified as part of the wildland-urban interface and is within one mile of the Lincoln townsite, which was identified as a high risk urban interface area. The proposed harvest would be designed to increase wildland fire safety in these areas by removing some of the existing ladder fuels, increasing crown spacing, and ensuring slash left on site for nutrient cycling does not increase decrease the ability to suppress a wildfire in the proposed harvest area.

20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:

Identify any wilderness or recreational areas nearby or access routes through this tract. Determine the effects of the project on recreational potential within the tract. Identify cumulative effects to recreational and wilderness activities.

Public use of the project area is limited because the land is surrounded by non-industrial private landowners who limit access. The Scapegoat Wilderness Area, which is approximately 11 miles north, is the nearest Wilderness area.

No direct, indirect, or cumulative effects to recreation or to the Wilderness Areas would be expected as a result of the proposed project.

21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:

Estimate population changes and additional housing the project would require. Identify cumulative effects to population and housing.

There would be no measurable direct, indirect, or cumulative impacts related to population and housing due to relatively small size of the timber sale proposed project.

22. SOCIAL STRUCTURES AND MORES:

Identify potential disruption of native or traditional lifestyles or communities.

No negative direct, indirect, or cumulative effects would be expected under either alternative.

23. CULTURAL UNIQUENESS AND DIVERSITY:

How would the action affect any unique quality of the area?

No negative direct, indirect, or cumulative effects would be expected under either alternative.

24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:

Estimate the return to the trust. Include appropriate economic analysis. Identify potential future uses for the analysis area other than existing management. Identify cumulative economic and social effects likely to occur as a result of the proposed action.

Alternative A - No Action

A grazing lease on the parcels would continue to generate approximately \$65.00 annually. The timber that is currently infested by the mountain pine beetle would continue to lose economic value.

Alternative B – Timber Harvest (Action)

Revenue from grazing would continue. The timber harvest would generate approximately \$16,900.00 for the Montana State University trust. This is based on a stumpage rate of \$13.00 per ton, multiplied by the estimated volume of tons (1,300). This stumpage rate was derived by comparing attributes of the proposed timber sale with attributes and results of other DNRC timber sales recently advertised for bid. Costs related to the administration of the timber sale program are only tracked at the Land Office and Statewide level. DNRC doesn't track project-level costs for individual timber sales. An annual cash flow analysis is conducted on the DNRC forest product sales program. Revenue and costs are calculated by land office and statewide. The most recent revenue-to-cost ratio of the Southwestern Land Office was 1.16. This means that, on average, for every \$1.00 spent in costs, \$1.16 in revenue was generated. Costs, revenues, and estimates of return are estimates intended for relative comparison of alternatives. They are not intended to be used as absolute estimates of return.

EA Checklist Prepared By:	Names: Neil Simpson	Date: 12-7-2011
	Titles: Management Forester	

V. FINDING

25. ALTERNATIVE SELECTED:

Alternative B- Timber Harvest (Action)

26. SIGNIFICANCE OF POTENTIAL IMPACTS:

Given this environmental assessment, I believe that this project will not cause any detrimental effect to the project area or surrounding properties or resources. This project is also consistent with the requirements of the Montana State Statute 77-5-207 and the Lincoln Rural Fire District Fire Risk Management Strategy and Community Protection Plan of 2005 (discussed within EA part 19 *Locally Adopted Environmental Plans And Goals*).

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

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EIS

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More Detailed EA

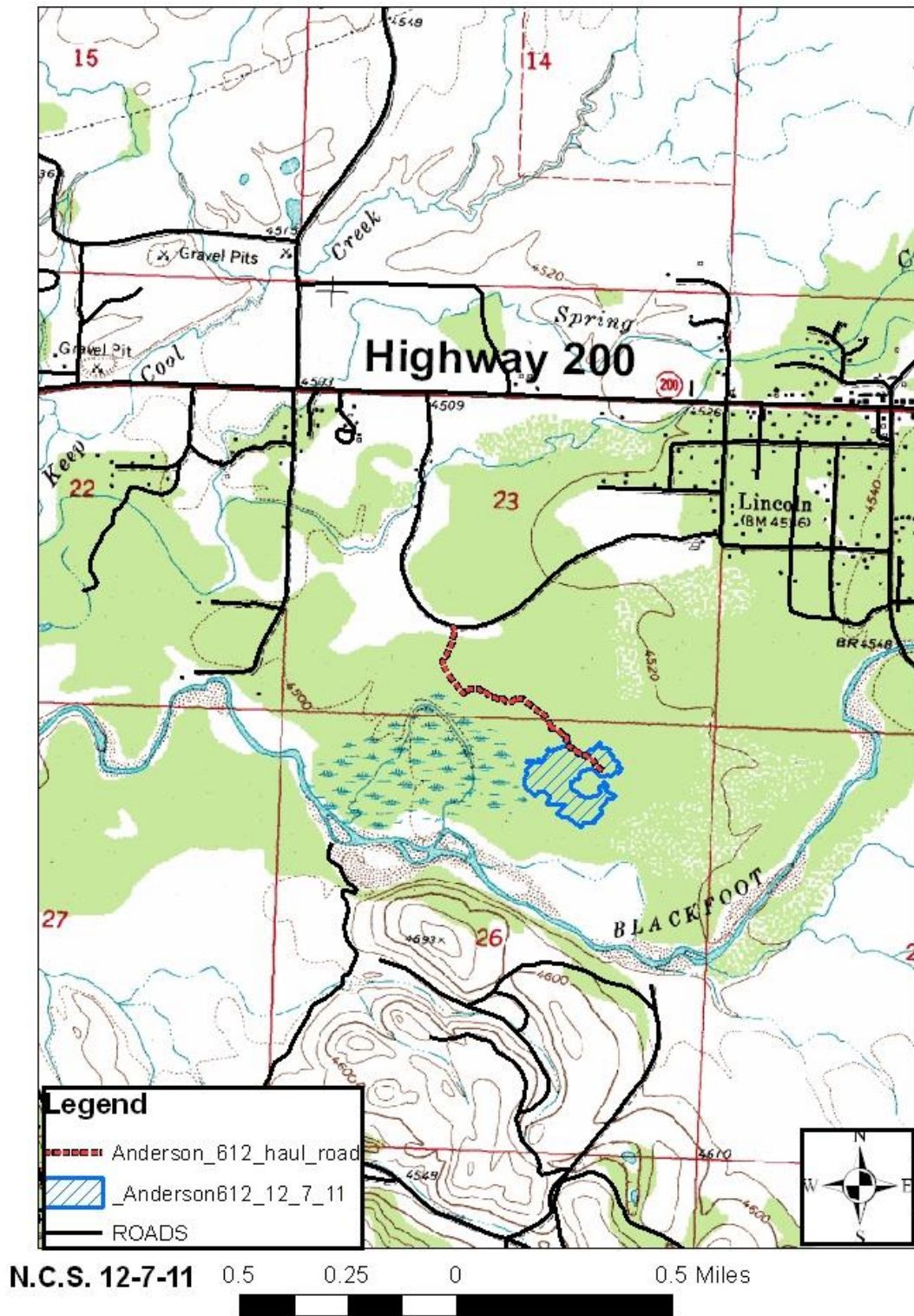
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No Further Analysis

EA Checklist Approved By:	Name: Craig V. Nelson
	Title: Supervisory Forester, Clearwater Unit, Montana DNRC
Signature: /S/ Craig V. Nelson	
Date: December 8, 2011	

Attachment A

Brent Anderson 612
Section 26 T14N R9W



CHECKLIST ENVIRONMENTAL ASSESSMENT

For
Endangered, Threatened and Sensitive Species

Threatened and Endangered Species	<p>[Y/N] Potential Impacts and Mitigation Measures</p> <p>N = Not Present or No Impact is Likely to Occur</p> <p>Y = Impacts May Occur</p> <p>L = Low Potential for Effects</p>
Lynx (<i>Felis lynx</i>), Federally threatened.	[N] No suitable lynx habitats exist in the project area. Thus, no direct, indirect, or cumulative effects to Canada lynx would be expected to occur as a result of either alternative.
Grizzly Bear (<i>Ursus arctos</i>), Federally threatened.	[L] The project area is over 2 miles from the Red Mountain subunit of the Monture Landers Fork bear management unit of the Northern Continental Divide Ecosystem (NCDE) and is in the “occupied habitat” area as mapped by grizzly bear researchers and managers to address increased sightings and encounters of grizzly bears in habitats outside of recovery zones (Wittinger 2002). Extensive use of the project area by grizzly bears is not likely given the proximity to the town of Lincoln and other human developments, the open roads, habitats present, and lack of large secure areas. The proposed harvesting would occur adjacent to open roads and private access routes where disturbance likely limits usefulness of the area for grizzly bears. In general cover would be reduced through the proposed harvesting, but measures to maintain visual screening cover along riparian areas would benefit grizzly bears should they be using the area. Proposed activities would largely retain a reasonably fully stocked stand following completion, which would further minimize the potential for disturbance to grizzly bears. Thus, a low risk of adverse direct, indirect, or cumulative effect to grizzly bears would be anticipated with the proposed activities.
DNRC Sensitive Species	<p>[Y/N] Potential Impacts and Mitigation Measures</p> <p>N = Not Present or No Impact is Likely to Occur</p> <p>Y = Impacts May Occur</p> <p>L = Low Potential for Effects</p>
Bald Eagle (<i>Haliaeetus leucocephalus</i>)	[L] The project area is between 0.5 and 0.75 miles from the Lincoln bald eagle territory. This territory has been intermittently monitored over the last 10 years, with successful reproduction occurring during 2 of the last 5 surveys. A new territory was recently identified approximately 2.75 miles from the project area, which may be a new nest for the pair that has used this nest in the past. Proposed harvesting could reduce potential nest and/or perch trees, but prescriptions would retain numerous large emergent trees and snags. Proposed harvesting would occur during the non-nesting period (August 16 – February 1) and would retain important structural and ecological characteristics including ample stocking, large emergent trees, snags, and vegetative screening. While proposed activities are occurring, eagles could be displaced, however, potential for displacement would only be expected to affect eagles during the activities and not beyond. Thus, a low to moderate risk of adverse direct, indirect, or cumulative effects to bald eagles would be anticipated with the proposed activities.

Black-backed Woodpecker (<i>Picoides arcticus</i>)	[N] No recently (less than 5 years) burned areas are in the project area. Thus, no direct, indirect, or cumulative effects to black-backed woodpeckers would be anticipated to occur as a result of either alternative.
Coeur d'Alene Salamander (<i>Plethodon idahoensis</i>)	[N] No moist talus or streamside talus habitat occurs in the project area. Thus, no direct, indirect, or cumulative effects to Coeur d'Alene salamanders would be anticipated to occur as a result of either alternative.
Columbian Sharp-tailed Grouse (<i>Tympanuchus phasianellus columbianus</i>)	[N] No suitable grassland communities occur in the project area. Thus, no direct, indirect, or cumulative effects to Columbian sharp-tailed grouse would be anticipated to occur as a result of either alternative.
Common Loon (<i>Gavia immer</i>)	[N] No suitable lakes occur in the project area. Thus, no direct, indirect, or cumulative effects to common loons would be anticipated to occur as a result of either alternative.
Fisher (<i>Martes pennanti</i>)	[L] Some potential fisher habitats likely exist in the proposed project area, but the species composition and the existing conditions in the surrounding landscape may limit fisher use. Much of the proposed unit is more than 100 feet from the main channel of the Blackfoot River; riparian habitats exist in the proposed unit where the unit is closer to the stream for limited distances and in those riparian habitats associated with adjacent wetlands connected to the river. Proposed harvesting would retain adequate canopy cover and other structural attributes in those riparian areas so that those areas would continue to be considered suitable fisher habitats. Reductions in upland habitats on roughly 19 acres would be anticipated with the proposed harvesting, which would further reduce the likelihood of the area supporting fisher. Thus, a low risk of adverse direct, indirect, or cumulative effects to fisher would be anticipated with the proposed activities.
Flammulated Owl (<i>Otus flammeolus</i>)	[N] No suitable dry ponderosa pine stands exist in the project area. Thus, no direct, indirect, or cumulative effects to flammulated owls would be expected to occur as a result of either alternative.
Gray Wolf (<i>Canis lupus</i>)	[L] No wolf packs are known to exist within five miles of the project area; however there are 3 different suspected packs in the vicinity of the project area (<i>Sime et al. 2011</i>). Big game winter range exists in the project area and use of the project area by big game was noted during field visits. Given the nature of the proposed activities and the ongoing reductions associated with the tree mortality, negligible to no changes in winter range capacity could occur, but no appreciable changes in either big game or gray wolf use of the area would be anticipated. Additionally, if den or rendezvous sites are discovered near the project area, operations would cease until additional mitigations could be implemented to stay compliant with ARM 36.11.430. Thus, a low risk of adverse direct, indirect, or cumulative effects to gray wolves would be expected to occur as a result of either alternative.
Harlequin Duck (<i>Histrionicus histrionicus</i>)	[N] No suitable high-gradient stream or river habitats occur in the project area. Thus, no direct, indirect, or cumulative effects to harlequin ducks would be anticipated to occur as a result of either alternative.
Mountain Plover (<i>Charadrius montanus</i>)	[N] No prairie dog colonies or other shortgrass prairie habitats occur in the project area. Thus, no direct, indirect, or cumulative effects to mountain plovers would be anticipated to occur as a result of either alternative.
Northern Bog Lemming (<i>Synaptomys borealis</i>)	[N] No suitable sphagnum bogs or fens occur in the project area. Thus, no direct, indirect, or cumulative effects to northern bog lemmings would be anticipated to occur as a result of either alternative.

Peregrine Falcon (<i>Falco peregrinus</i>)	[N] No suitable cliffs/rock outcrops occur in the project area or within 1 mile of the project area. Thus, no direct, indirect, or cumulative effects to peregrine falcons would be anticipated to occur as a result of either alternative.
Pileated Woodpecker (<i>Dryocopus pileatus</i>)	[L] Limited suitable habitats exist in the project area as scattered pockets of potential habitats surrounded by unsuitable areas that likely only receive minor levels of use by pileated woodpeckers. The proposed harvesting could reduce foraging and, to a lesser degree, potentially suitable nesting structures. Based on the limited area involved, proposed activities would only affect a few individuals, and activities would largely be conducted during the non-nesting period. Thus, a low risk of adverse direct, indirect, or cumulative effects to pileated woodpeckers would be anticipated with the proposed activities.
Townsend's Big-eared Bat (<i>Corynorhinus townsendii</i>)	[N] No suitable caves or mine tunnels are known to occur in the project area. Thus, no direct, indirect, or cumulative effects to Townsend's big-eared bats would be anticipated to occur as a result of either alternative.
Big Game Species	[Y/N] Potential Impacts and Mitigation Measures N = Not Present or No Impact is Likely to Occur Y = Impacts May Occur L = Low Potential for Effects
Elk (<i>Cervus elaphus</i>) White-tailed Deer (<i>Odocoileus virginianus</i>) Moose (<i>Alces americanus</i>)	[L] White-tailed deer, elk, and moose may use the project area as part of their summer range; additionally, winter range for each of these species exists in the project area. No elk security habitat exists in the proposed project area due to the proximity to open roads and private access routes. Proposed harvesting could reduce snow intercept and thermal cover attributes, but some of these attributes that would be removed with the proposed harvesting would be lost with ongoing mortality in the trees in the project area should no actions be undertaken. Generally, some reductions in quality of a small portion of the winter range would be anticipated that would not appreciably alter big game populations in the area. Thus, a negligible risk of adverse direct, indirect, or cumulative effects to white-tailed deer, elk, and moose would be anticipated with the proposed activities.

References:

Sime, C. A., V. Asher, L. Bradley, N. Lance, K. Laudon, M. Ross, A. Nelson, and J. Steuber. 2011. Montana gray wolf conservation and management 2010 annual report. Montana Fish, Wildlife & Parks. Helena, Montana. 168 pp.

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